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**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
Before the Board of Patent Appeals and Interferences**

Applicant: Jon R. Stieber et al.

Art Unit: 2682

Serial No. 10/005,023

Examiner: E. Yun

Filed: December 4, 2001

For: WIRELESS NETWORKED CASH HANDLING  
MANAGEMENT SYSTEM

Docket No: 180009.91206A

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**TRANSMITTAL OF BRIEF ON APPEAL**

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Mail Stop Appeal Brief - Patent  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Applicant hereby submits its brief in the appeal of the final rejection of the subject patent application.

The \$500.00 fee for filing a brief and any other fees due should be charged to Deposit Account No. 17-0055.

Respectfully submitted,

By:

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PATENT

Dkt No. 180009.91206A

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
Before the Board of Patent Appeals and Interferences**

Applicant: Jon R. Stieber et al.                      Art Unit: 2682  
Appl. No.: 10/005,023                                      Examiner: E. Yun  
Filed:                      December 4, 2001  
For:                      WIRELESS NETWORKED CASH MANAGEMENT SYSTEM

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**APPELLANTS' BRIEF ON APPEAL**

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Mail Stop Appeal Brief - Patents  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Appellants, Jon R. Stieber et al., having filed a timely Notice of Appeal in the above identified patent application, hereby submits this brief.

**I. REAL PARTY IN INTEREST**

The real party in interest is the assignee, De La Rue Cash Systems Inc., an Illinois corporation.

**II. RELATED APPEALS AND INTERFERENCES**

There are no related appeals or interferences.

**III. STATUS OF CLAIMS**

Claims 1-22 are pending in the subject patent application and stand finally rejected. This appeal is taken with respect to claims 1-22, which are set forth in Appendix A hereto.

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#### **IV. STATUS OF AMENDMENTS**

All amendments have been entered.

#### **V. SUMMARY OF THE CLAIMED SUBJECT MATTER**

One embodiment of the present invention is illustrated in Figs. 1, 2 and 3.

##### **RELATION OF INDEPENDENT CLAIM 1 TO THE DRAWINGS AND DESCRIPTION.**

A wireless networked cash management system is shown in Fig. 1 and described at para 0015.

At least one cash handling device in the system for performing at least one of the operations of coin sorting, coin counting, note counting, note sorting and cash redemption is shown as elements 13, 14, 15, 15 and 17 in Fig. 1 and described in para. 0015.

A system control unit for performing at least one of a plurality of operations is shown as element 12 in Figs. 1 and 2 and is described in para. 0016.

The functions of the system control unit in accounting for cash dispensing by the cash handling device, providing for cash settlement of transactions carried out by the cash handling device and monitoring maintenance information are described in para. 0023. The control unit providing commands to the cash handling device for operation of the cash handling device is described in para. 0024.

The limitation wherein the cash handling device and said system control unit communicate through a wireless communication network operating according to a standard for locally distributed wireless networks is described in para. 0016 and para. 0010.

The limitation wherein the locally distributed wireless network communicates directly without intermediate servers and within a range between the cash handling device and the control unit of no more than approximately 100 meters is disclosed in para.0016 as follows, and the fact that no intermediate servers are shown in the drawings:

"The transceiver 24 is preferably an RF transmitter and receiver operating in accordance with the Bluetooth communications specification. However, transceivers operating according to other specifications such as IrDA for infrared communication ports, Home RF and SWAP (Shared Wireless Access Protocol) (IEEE 802.11) can also be used. These networks operate in a range of frequencies which are available for locally distributed systems in which the equipment is no further apart than a range of from approximately 2 meters to approximately 100 meters."

The limitation that this network communicates directly without intermediate servers is also supported by the Bluetooth specification, which is incorporated by reference in the specification by reference to it, and which is accessible and known to those of ordinary skill in the art.

#### RELATION OF INDEPENDENT CLAIM 13 TO THE DRAWINGS AND DESCRIPTION.

A wireless networked cash management system is shown in Fig. 1 and described at para 0015.

A system control unit including a radio frequency transceiver is shown in Fig. 2 and described in para. 0016.

A cash handling device, the cash handling device including a radio frequency transceiver for communicating cash handling data and status data to the control unit is shown as elements 13, 14, 15, 15 and 17 in Fig. 1 and described in para. 0015 and shown in Fig. 3 and described in paras. 0017-0020.

The limitation wherein the transceivers communicate within a range of no more than approximately 100 meters is described in para.0016.

The limitation that this network communicates directly without intermediate servers is also supported by the Bluetooth specification, which is incorporated by reference in the specification by reference to it, and which is accessible and known to those of ordinary skill in the art. The limitation description of the system in para. 0016 in view of the illustration in Fig. 1 without any intermediate servers.

The limitation wherein the system control unit performs at least one of the operations of accounting for cash dispensing by the cash handling device, providing for cash settlement of transactions carried out by the cash handling device and monitoring maintenance information are described in para. 0023.

## VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

### A. THE PRIOR ART REJECTION UNDER 35 U.S.C. 102 (e).

Claims 1-22 were rejected under 35 U.S.C. 102(e) as being anticipated by Waller et al. (US2001/0051922). (FINAL ACTION, PARA. 3).

### B. REJECTION OF CLAIM 20 UNDER 35 U.S.C. 112, Paragraph ONE

Claim 20 was rejected under 35 U.S.C. §112, first paragraph, as not being supported by a written description in the application. (FINAL ACTION, para. 2).

It was said that the following limitation was not supported by the specification and drawings:

"wherein the system control unit performs at least one of the operations of cash dispensing, providing for cash settlement and monitoring maintenance information without needing authorization of user access from a remotely located network host computer."

## VII. ARGUMENT

### A. THE CLAIMED SUBJECT MATTER IS NOT ANTICIPATED OR OBVIOUS OVER WALLER.

#### 1. ANTICIPATION STANDARD

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). "The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). The elements must be arranged as required by the claim . . . . *In re Bond*, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990).

#### 2. OBVIOUSNESS CONSIDERATIONS UNDER 35 U.S.C. 103 AND *GRAHAM v. JOHN DEERE*.

MPEP 2141 (Aug. 2005) states that Office policy is to follow *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), in the consideration and determination of obviousness under 35 U.S.C. 103. ...[T]he four factual inquiries enunciated therein as a background for determining obviousness are as follows:

- (A) Determining the scope and contents of the prior art;
- (B) Ascertaining the differences between the prior art and the claims in issue;
- (C) Resolving the level of ordinary skill in the pertinent art; and
- (D) Evaluating evidence of secondary considerations.

This section goes on to state that when applying 35 U.S.C. 103 the following tenets of patent law must be adhered to:

- (A) The claimed invention must be considered as a whole;

(B) The references must be considered as a whole and must suggest the desirability and thus the obviousness of making the combination;

(C) The references must be viewed without the benefit of impermissible hindsight vision afforded by the claimed invention; and

(D) Reasonable expectation of success is the standard with which obviousness is determined.

(Emphasis supplied.)

In determining the differences between the prior art and the claims, the question under 35 U.S.C. 103 is not whether the differences themselves would have been obvious, but whether the claimed invention as a whole would have been obvious. *Stratoflex, Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 218 USPQ 871 (Fed. Cir. 1983); *Schenck v. Nortron Corp.*, 713 F.2d 782, 218 USPQ 698 (Fed. Cir. 1983). MPEP 2141.02 (emphasis in original.)

MPEP 2143.01 provides that "[t]here are three possible sources for a motivation to combine references: the nature of the problem to be solved, the teachings of the prior art, and the knowledge of persons of ordinary skill in the art. *In re Rouffet*, 149 F.3d 1350, 1357, 47 USPQ2d 1453, 1457-58 (Fed. Cir. 1998) (The combination of the references taught every element of the claimed invention, however without a motivation to combine, a rejection based on a *prima facie* case of obvious was held improper.). The level of skill in the art cannot be relied upon to provide the suggestion to combine references. *Al-Site Corp. v. VSI Int'l Inc.*, 174 F.3d 1308, 50 USPQ2d 1161 (Fed. Cir. 1999)."

MPEP 2143.01 provides that: "In determining the propriety of the Patent Office case for obviousness in the first instance, it is necessary to ascertain whether or not the reference teachings would appear to be sufficient for one of

ordinary skill in the relevant art having the reference before him to make the proposed substitution, combination, or other modification." *In re Linter*, 458 F.2d 1013, 1016, 173 USPQ 560, 562 (CCPA 1972)."

MPEP 2143.03 provides that all claim limitations must be taught or suggested. "To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). All words in a claim must be considered in judging the patentability of that claim against the prior art." *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970)."

The above points of law are cited as relevant to this appeal, because it will be shown that the Office Actions: 1) have not properly determined the content of the prior art, 2) have not properly determined the differences between the claimed subject matter and the prior art, and 3) has not considered the motivation factor in extending the Waller reference to limitations of the claims not found in the Waller reference.

The Brief will show first that the system control unit of the claims is not found in the Waller reference. The Brief will also show that other limitations in the claims are not found in the Waller reference. Therefore, the Examiner has not made out a *prima facie* case of obviousness under 35 U.S.C. 103 as to the independent claims or the separately argued dependent claims.



3. CLAIMS 1, 2, 8, 9, 10, 11, 13, 15, 16, 18 AND 19 ARE NOT ANTICIPATED OR MADE OBVIOUS BY WALLER.

The Examiner's final action reads Appellants' cash handling device on an ATM machine 14 illustrated in Waller, Fig. 5 (Final action, page 3, section 4, second paragraph.) Appellant concedes that an ATM can be considered a cash handling device.

But the Examiner's final action then reads Appellants' system control unit on a cell phone or PDA unit 26 illustrated in Waller, Fig. 6 (Final action, page 3, section 4, third paragraph.) Appellant strongly traverses this reading and its interpretation. Furthermore, Appellant states the system control unit in Waller is the host computer 12, 112, 212 in Fig. 1.

There is a simple proof of this. The Board need only ask, can Waller's system operate with only the PDA and ATM apart from the host computer 12, 112, 212. The answer is "No," it cannot. These two pieces 12 and 14 do not form a "system."

The Examiner's reading of the following limitations are also incorrect and this subject matter is not found in Waller:

"wherein said cash handling device and said system control unit communicate through a wireless communication network operating according to a standard for locally distributed wireless networks; and

"wherein the locally distributed wireless network communicates directly without intermediate servers and within a range between the cash handling device and the control unit of no more than approximately 100 meters."

The host computer 12 in Waller (the system control unit) does not communicate to the ATM through a wireless network "without intermediate servers and within a range between the cash handling device and the control unit of no more than approximately 100 meters."

Further, the Examiner's final action reads the cell phone or PDA in Waller as performing at least one of a plurality of operations of accounting for cash dispensing by the cash handling device, providing for cash settlement of transactions carried out by the cash handling device and monitoring maintenance information, citing paras. 0011 and 0014 of Waller.

Appellant traverses this finding. None of these limitations is described in paras. 0011 and 0014 of Waller.

In the Office action of May 27, 2005, the Examiner stated:

"[T]he Examiner also believes that the Waller reference still reads on Applicant's claims. First of all, it is now clear by citation of paragraphs such as [0011] and [0057] that the reference teaches a system control unit and a cash handing device communicating with each other when the system control unit is in the vicinity of the device including a distance of 100 meters or less. There is no indication that the system control unit cannot be a PDA or cell phone. (Emphasis supplied.)

(Appellants note: There is every indication in the present specification that the system control unit is not a PDA or cell phone.)

In the same action, the Examiner stated:

Second of all, the first embodiment of Waller's invention, shown in paras. 0008-0014 and cited in the limitations of the above claims, never indicates that authorization from a remotely located device is needed to perform an operation on the cash handling system as a system control unit.

(Appellants' response: This is indicated, however, in other paragraphs of the specification.)

Under the "broadest reasonable interpretation" rule governing interpretation of claims in the USPTO, the Examiner cannot adopt an interpretation of terms in the claims in a manner inconsistent with 1) the specification, 2) the other claims 3) the prior art or 4) the understanding of one of ordinary skill in the art. *In re Bond*, 910 F.2d 831, 833, 15 U.S.P.Q.2D (BNA) 1566, 1567 (Fed. Cir. 1990): ("It would be unreasonable for the PTO to ignore any interpretive guidance afforded by the applicant's written description. The PTO applies to the verbiage of the proposed claims the broadest reasonable meaning of the words in their ordinary usage as they would be understood by one of ordinary skill in the art, taking into account whatever enlightenment by way of definitions or otherwise that may be afforded by the written description contained in the applicant's specification.")

In the present appeal, the Examiner has exceeded all bounds of reasonableness, and of the specification and of the ordinary meaning of the claim recitations to develop a fantastic interpretation of the term "system control unit." However, even if the Examiner were correct in finding those three words in the Waller reference, there are many other limitations of the claims that are not found in the Waller reference, and these cannot be supplied simply by citing the Examiner's opinion as ordinary skill in the art. The Waller reference actually shows that some of the claim limitations are actually disclosed as the opposite in the Waller reference.

#### THE CONTENT OF THE WALLER REFERENCE

Waller discloses a PDA (Fig. 3, para. 0060) or a cell phone (Fig. 6, para. 0067) for sending a request through an Irda port 62 to an ATM machine (Fig. 5, 14a, Fig. 9, 214a).

The ATM machine relays the request to a central controller or host (Fig. 1, 212) through a network (16, 116, 216). The

network is not described in detail but the symbol in the drawings is the symbol used for the Internet.

The host or central computer then authorizes the ATM machine (the terminal) through the Internet to dispense money or take some other action.

In a second embodiment, Waller discloses a cell phone (Fig. 8). In the cell phone embodiment a call goes through a cell phone network with servers (not a local network) to a transceiver 122 in the host (Fig. 7) or to a transceiver 222a in the ATM which has a telephone number (para. 0081). It travels miles as a signal and through servers even though the cell phone is near the ATM machine. The ATM machine then sends the request over the Internet to the host central computer which then authorizes the transaction back through the Internet.

The Waller disclosure is about providing a user interface and I/O device (the PDA or cell phone) to an ATM machine.

This user interface device in Waller compares to Appellants' I/O devices in claim 5 which include recitation of a cell phone. The user interface device of Waller does not compare to either of Appellants' cash handling device or the system control unit recited in claims 1 and 13.

The Office Action confuses the "system control unit" claimed in claim 1 with the handheld PDA in Waller.

#### THE DISTINCTIONS OF CLAIMS 1 AND 13 OVER WALLER

Appellants do not consider their system control unit to compare to the handheld PDA because the system control unit must perform cash handling functions such as cash dispensing, providing for cash settlement, or monitoring maintenance information as well as providing commands to the cash handling device for operation of the cash handling device.

The "system" of the claims is described in the specification as follows:

"The system 10 comprises a system control unit 12, which may be a network server, and a plurality of distributed cash handling devices 11, which communicate with the system control unit 12 through the wireless network." (Para. 0015)

"Referring now to Fig. 2, a block diagram of the system control unit 12 is shown. The system control unit 12 preferably comprises a computer (Note: Fig. 2 shows a personal computer), such as a personal computer, workstation, or other computing device. The control unit 12 includes a transceiver 24 and antenna 26 for communicating data to and from the cash handling devices 11, and a network communications link 28 for coupling the control unit 12 to an external network 29 such as a LAN (local area network), WAN (wide area network), the Internet, or to an intranet network." (Note: a second network connection claimed in claims 6 and 7). (Para. 0016)

"Data collected by the cash handling machines 11 is transmitted to the system control unit 12, which can be programmed to provide a number of functions, depending on the application. The control unit 12 can, for example, be programmed to provide accounting functions. Examples of such functions include monitoring available cash levels, providing cash settlement functions, where cash received is compared to cash expected in a transaction, and batching functions, for example, accepting data related to coins and notes counted and dispensed in a single batch deposit or withdrawal. The control unit 12 can also provide error and maintenance monitoring for each of the cash handling devices 11. The cash handling devices 11 can, for example, be monitored to assure proper accounting, and to provide error histories to service personnel." (Para. 0023)

The present invention is designed to distribute cash handling functions for notes and coins and daily accounting functions among several machines in a proximity of 100 meters. In this regard, it is pointed out that, in Waller, it is not the system control unit which is within 100 meters. Waller's system control unit is the host 12, 112, 212, which would be located at a bank remote from the ATM and often connected by a WAN wired network or possibly some wireless ATM's utilizing communication servers.

The objectives of the prior art and the present invention couldn't be more different from a system perspective. The only similarities are: 1) that ATM machines handle cash and 2) that it is proposed to communicate through a local wireless network. But, in no instance, does that user interface device (the PDA) in Waller perform system control unit or cash handling functions within the scope of the present claimed invention.

Claim 1 recites that the control unit performs two functions: 1) at least one of the operations of accounting for cash dispensing, cash settlement, and monitoring maintenance information and 2) also providing commands for operation of the cash handling device.

Claim 1 also recites that the locally distributed network operates without intermediate servers and within an range of no more than approximately 100 meters. This distinguishes from Internet networks such as 16, 116 and 216 and the cellular phone networks in Waller which use servers.

Claim 13 has been amended similar to claim 1 to recite that the control unit performs at least one of the operations of cash dispensing, providing for cash settlement, and monitoring maintenance information.

Appellant reiterated that the system control unit of claim 1 includes the following additional limitations for performing at least one of the operations of:

1) accounting for cash dispensing (by the cash dispensing machine),

2) providing for cash settlement, and

3) monitoring maintenance information.

The term "system control unit" included the additional recitation of its functions is with respect to the system of machines and is not with respect to the user as in a "user control unit". The present application defines the PDA or a cell phone as an "I/O device," (see para. 0020) and this is the function being performed by the PDA in Waller.

During an Interview with the Examiner on July 6, 2005 (made of record in Applicant's Reply of August 5, 2005), it was discussed that the system control unit language of claim 1 was not met by the handheld PDA (personal digital assistant) in the Waller reference. The PDA performs the function of a TV remote control, so that a user didn't have to use a keyboard on the automatic teller machine (ATM). It is defined in the present specification as an I/O device. It is labeled I/O device in the drawings. It is claimed in claim 5 as an I/O device in addition to the system control unit.

The present specification describes the I/O devices in para. 0009 as follows:

In addition, I/O devices can be added to the system, including peripheral input, output, and communication devices such as displays and printers; scanners, keyboards, and touch screens, and pagers, cellular phones, and personal digital assistants, among other known devices.

Para. 0021 of the present specification further provides;

The control unit 12 can also provide commands to and receive data from peripheral I/O devices 21. . . . The control unit 12 can also provide error or maintenance

information, including "machine full" or "machine empty" information to communication devices such as pagers and cellular phones. (This is only disclosed in the present application, not the Waller reference.)

It was asked of the Examiner how claim 5 could be rejected over the prior art, since Waller does not show any embodiment with two PDA's, one PDA as a system control unit and one PDA as a I/O device, which would be necessary to find anticipation or obviousness of claim 5.

The Examiner's answers indicated that he had not really reconsidered the prior art rejection of dependent claims 5 and 6 as of that time. The Examiner could not have rejected claim 5 on Waller, because it would have required reading two different elements in the claims on a single element in the reference (reading both system control unit and I/O device of claim 5) on the single PDA in Waller.

The Examiner stated that unless the specification stated that the PDA's could only be called "I/O devices" that he could consider the PDA as a system control unit not limited by how the terms are used in the specification, in claim 5 or in the prior art. This is believed to be an error of law. Under the "broadest reasonable interpretation" rule governing interpretation of claims in the USPTO, the Examiner cannot adopt an interpretation of terms in the claims in a manner inconsistent with 1) the specification, 2) the other claims 3) the prior art or 4) the understanding of one of ordinary skill in the art.

The paragraphs in Waller (in brackets) cited in the Office action to support the idea that the PDA performed "accounting for cash dispensing, providing for cash settlement and monitoring maintenance information" don't support those conclusions or mention those functions when the paragraphs are reviewed in detail.



As just one example of many examples in the Office action of this type, the Office Action cites paras. 0009, 0011 and 0014 of Waller for the proposition that Waller provides commands and monitors maintenance information without needing authorization from a remotely located device.

Paragraph 0009 reads:

By virtue of this aspect of the invention an SST is provided that does not require a display or a keypad. The SST is intended to be used by a user having a portable communication device such as a personal digital assistant (PDA) or a cellular telephone. By using the PDA or cellular telephone, the user is providing his/her own user interface. The PDA may be a Psion (trade mark) Series 5 PDA, a 3-Com (trade mark) Palm IIIX (trade mark) PDA, or such like. The cellular telephone may be a conventional cellular telephone.

(Appellants' note: this paragraph only identifies the device as a PDA or cell phone as an I/O device; it doesn't describe its operations in detail.)

Paragraph 0011 of Waller reads:

The communication port may be accessible using a local wireless technology, such as Bluetooth (trade mark), an IrDA-compliant (Infra-red Data Association) protocol, or such like. This has the advantage that the user must be located in the vicinity of the communication port (and therefore in the vicinity of the terminal) to operate the terminal. Alternatively, the communication port may be accessible using wireless telephony.

(Appellants' note: it is conceded that the PDA communicates via wireless communications. So does the PDA in the present application. But the PDA in the present

application is not a system control unit for cash settlement and neither is the PDA in Waller.)

Paragraph 0014 reads:

Preferably, the communication port is operable to transmit transaction information to the user's portable communication device so that the user is provided with feedback about the transaction, such as status information. The information may be in audio form or in text form.

There is no mention in paragraphs 0009, 0011 and 0014 in Waller of cash settlement or monitoring maintenance information. In fact, maintenance is only mentioned in a very different sense in para. 0082. Thus, the language from the claims cited in the Office action as supported by 0009, 0011 and 0014 are not, in fact, supported by these paragraphs of Waller.

If one refers to the paragraphs mentioned in the Office action regarding Waller, one finds that few of the words presented in the Office action are found in the cited paragraphs of Waller. In its last reply Appellant clearly distinguished Waller from the present invention, once the terms of the claims are properly interpreted. Appellant has also previously pointed out that the statements in the Office actions are not supported by the cited paragraphs of Waller.

The Examiner's position was that he had not given effect to the language in the claims other than the language concerning radios and that the phrase regarding "without needing authorization" (now placed in claim 20) was not supported by the specification.

It is noted here that the Examiner made a one-issue non-art rejection of all of the claims in the Office action of May 27, 2005, rather than reconsidering the full set of claims on all of the prior art issues. This is the same action in which

the Examiner made the comments on page 7 that in view of paras. 0011 and 0057 there was no indication that the system control unit could not be the PDA of Waller.

#### FINAL ACTION RESPONSE TO ARGUMENTS

In the final action the Examiner commented in response to Applicant's arguments and amendments:

Examiner's comments, sec. 6, page 7, second para.:

After careful consideration of the applicant's argument and amendments, the examiner still believes that the Waller reference reads on the applicant's claims and that the handheld PDA device in the Waller reference can equate to the system control unit in the claimed invention. Referring to paragraph [0021] of the specification of the claimed invention, it states that "the system control unit preferably comprises a computer, such as a personal computer, workstation, or other computing device." Based on that statement, the examiner now believes that the term "system control unit" can be viewed much more broadly since it can be any computing device. The handheld PDA in the Waller reference is indeed a computing device and therefore, in addition to the fact that nothing else in the independent claims state otherwise, the handheld PDA in the Waller reference can clearly equate to the system control unit in the claimed invention. This also proves that even if the examiner must refer to the specification for the exact meaning of a system control unit, the handheld PDA in the Waller reference still can equate to the system control unit in the claimed invention.

Appellants' Reply:

The four functions disclosed in para. 0021 of Waller are:

- 1) requesting an amount of cash (by the PDA);
- 2) the ATM obtaining authorization (from the host);
- 3) the ATM dispensing an amount of cash; and
- 4) the ATM charging a service fee for the transaction, maybe in cooperation with the host.

None of these supports the Examiner's conclusion that the PDA in Waller is accounting for the cash dispensing of the ATM machine.

There are several reasons that the PDA would not be used to account for cash dispensing from the ATM machine: 1) lack of

software, 2) lack of security and 3) lack of desire to give this function to retail customers.

Examiner's comments, sec. 6, page 7, third para.:

The examiner slightly modified the rejection in the independent claims in order to read on the newly submitted amendments. The examiner still believes that the limitation of "monitoring maintenance information" is shown in paragraphs [0011] and [0014] of the Waller reference. In paragraph [0014] it teaches that the cash handling device can transmit status information to the user's portable device, which is believed by the examiner to equate to monitoring maintenance information. However, even if the above were not true, the limitation of "accounting for cash dispensing by the cash handling device" is very clearly taught in paragraph [0021] of the Waller reference. Only one of the limitations needs to be taught.

Appellants' Reply:

Appellants submit that the Examiner's reading of the status information as including maintenance information about the ATM is pure speculation and is not supported by Waller. As to the accounting for cash dispensing, this was discussed above.

There are several reasons that the PDA would not be used to account for cash dispensing from the ATM machine: 1) lack of software, 2) lack of security and 3) lack of desire to give this function to retail customers.

Examiner's comments, sec. 6, page 8, first full para.:

In response to the argument that the Waller reference does not teach any embodiment with two PDAs, it is not stated anywhere in the claims, especially the independent claims, that two PDAs are needed. Therefore, the examiner considers this argument moot.

Appellants' Reply:

Appellants' maintains that the system control unit is one element of claim 5 by virtue of incorporation of claim 1, and that the I/O device of claim 5, 18 and 22 are each a second

element of the claim and that these are separate and different elements or machines per the specification. The Examiner reads both elements of claim 5, 18 and 22, on one element in the reference. (Note claim 18 recites a printer, not a cell phone.) This double reading of elements of the claim on one element in the reference is not a reasonable interpretation under the patent laws.

Examiner's comments, sec. 6, page 8, first full para.:

The examiner believes that the claiming of an I/O device in claims 5, 18, and 22 simply narrows the interpretation of what the system control unit can be. Either way, Waller still teaches a PDA, which is an I/O device.

Appellants' Reply:

The Examiner is apparently unaware of the interpretation of words in the claims such as "further comprising" which adds a new element to the claim rather than narrowing an existing element, as does the term "wherein." *Landis on Mechanics of Claim Drafting*, 4th ed. 1999, §11, pages II-25 to II-28.

Examiner's comments, sec. 6, page 8, first full para.:

Finally, the examiner reiterated the previous 112 rejection towards claim 20 stating that the specification did not support the limitation in which "the system control unit performs at least one of the operations of cash dispensing, providing for cash settlement and monitoring maintenance information without needing authorization of user access from a remotely located network host computer". The applicant argued that because the specification somewhat stated that authorization of user access is optional, it is inherent that authorization is not needed. The examiner reintroduces the statement in paragraph [0029] of the applicant's specification, stating that "security features, including authentication and encryption algorithms, can be used to secure

communications between devices". When the above cited passage is combined with the fact that nowhere in the specification specifically taught the fact that authorization of user access from a remotely located network host computer is not needed or not required, one skilled in the art can also believe that it is inherent that authorization is mandatory. Therefore, the examiner still believes that not enough support is supplied by the specification in order to discount the limitations in claim 20 as new matter.

Appellant's Reply:

The Examiner confuses the words "can" which is used in para. 0029 with "must" which is not found in para. 0029 or elsewhere. The feature is optional in the present specification. There is no demonstration of security in the detailed embodiments of the present specification as there is in Waller. The Examiner fails to consider the stated environment of the detailed embodiment of the invention in a bank teller area (specification, para. 0026) vs. the ATM being the public for dispensing cash. In addition, encryption is provided in para. 0029 as an alternative to authorization, where security is desired. The Examiner's argument that para. 0029 recites mandatory authorization is not believable.

The Office Action misreads the units of the claimed invention on the units in the Waller reference. The cell phone or PDA, in fact, compares to neither of Appellants' cash handling device nor Appellants' system control unit except as to its communication of data through wireless communication.

It seems that if the limitations in the claims 1 and 13 are not anticipated by Waller in the manner asserted by the Examiner, then they are not found in the references so as to support a finding of obviousness. The Examiner cannot supply missing material limitations with his own opinion that they are within the level of skill in the art. They must be found in one or the other of the references.

4. CLAIM 3 IS NOT ANTICIPATED OR MADE OBVIOUS BY WALLER.

Claim 3 depends from claim 2 which depends from claim 1, thereby adding the following limitations:

"wherein the cash handling device is a coin handling device for performing at least one of the operations of coin sorting, coin counting and cash redemption; and

"further comprising a currency handling device for performing at least one of the operations of note sorting, note counting and cash redemption, wherein said currency handling device and said control unit communicate through the wireless communication network."

The Examiner errors by reading the system control unit as the PDA, the coin handling device as the ATM, and the currency handling device as the same ATM. Unfortunately for the Examiner's reading, the coin handling and note handling portions of one ATM do not communicate through the wireless network. This is a clear error in claim reading and reversal is strongly urged here.

It seems that if the rejected claims are not anticipated by the art in the manner asserted by the Examiner, there are no findings upon which an obviousness case has been made out so as to require rebuttal.

5. CLAIMS 5, 2/5 and 4/5 and 22 ARE NOT ANTICIPATED OR MADE OBVIOUS BY WALLER.

Claim 5 recites "[t]he cash management system of claim 1, 2, 3 or 4, further comprising at least one I/O device, wherein the I/O device is a cell phone or a personal digital assistant."

Claim 22 recites: "[t]he cash management system of claim 13, further comprising at least one I/O device, wherein the I/O device is a cell phone or a personal digital assistant."

The sole rejection in the final action of claims 5 and 22 is as follows:

"Waller teaches at least one I/O device, wherein the I/O device is a cell phone or personal digital assistant."

During an Interview in this application, it was discussed that if the system control unit language of claim 1 was met by the handheld PDA (personal digital assistant) in the Waller reference, then the PDA in Waller could not be used to meet the limitation of claim 5 to an I/O device comprising a PDA, due to the rule against double reading of claim limitations on single elements in the reference.

It was asked of the Examiner how claim 5 could be rejected over the prior art, since Waller does not show any embodiment with two PDA's, one PDA as a system control unit and one PDA as a I/O device, which would be necessary to find anticipation or obviousness of claim 5.

The Examiner's answers indicated that he had not really reconsidered the prior art rejection of dependent claims 5 and 6 as of that time. The Examiner could not have rejected claim 5 on Waller, because it would have required reading two different elements in the claims on a single element in the reference (reading both system control unit and I/O device of claim 5) on the single PDA in Waller.

The Examiner stated that unless the specification stated that the PDA's could only be called "I/O devices" that he could consider the PDA as a system control unit not limited by how the terms are used in the specification, in claim 5 or in the prior art. This is believed to be an error of law. Under the "broadest reasonable interpretation" rule governing interpretation of claims in the USPTO, the Examiner cannot adopt an interpretation of terms in the claims in a manner inconsistent with 1) the specification, 2) the other claims 3)



the prior art or 4) the understanding of one of ordinary skill in the art.

In addition, the Examiner has not considered the multiple dependent nature of claim 5 or the claims 2/5, 4/5 as a whole with all of their limitations. Reversal is strongly urged here.

It seems that if the rejected claims are not anticipated by the art in the manner asserted by the Examiner, there are no findings upon which an obviousness case has been made out so as to require rebuttal.

6. CLAIM 1/3/5 IS NOT ANTICIPATED OR MADE OBVIOUS BY WALLER.

The sole rejection in the final action of claim 5 is as follows:

"Waller teaches at least one I/O device, wherein the I/O device is a cell phone or personal digital assistant."

During an Interview in this application, it was discussed that if the system control unit language of claim 1 was met by the handheld PDA (personal digital assistant) in the Waller reference, then the PDA in Waller could not be used to meet the limitation of claim 5 to an I/O device comprising a PDA, due to the rule against double reading of claim limitations on single elements in the reference.

It was asked of the Examiner how claim 5 could be rejected over the prior art, since Waller does not show any embodiment with two PDA's, one PDA as a system control unit and one PDA as a I/O device, which would be necessary to find anticipation or obviousness of claim 5.

The Examiner's answers indicated that he had not really reconsidered the prior art rejection of dependent claims 5 and 6 as of that time. The Examiner could not have rejected claim 5 on Waller, because it would have required reading two

different elements in the claims on a single element in the reference (reading both system control unit and I/O device of claim 5) on the single PDA in Waller.

The Examiner stated that unless the specification stated that the PDA's could only be called "I/O devices" that he could consider the PDA as a system control unit not limited by how the terms are used in the specification, in claim 5 or in the prior art. This is believed to be an error of law. Under the "broadest reasonable interpretation" rule governing interpretation of claims in the USPTO, the Examiner cannot adopt an interpretation of terms in the claims in a manner inconsistent with 1) the specification, 2) the other claims 3) the prior art or 4) the understanding of one of ordinary skill in the art.

In addition, the Examiner has not considered the multiple dependent nature of claim 5 and that claim 5 included the limitations of claims 1, 2 and 3.

Claim 2 adds the limitation: wherein the cash handling device is a coin handling device for performing at least one of the operations of coin sorting, coin counting and cash redemption.

Claim 3 adds to claims 1 and 2, a currency handling device for performing at least one of the operations of note sorting, note counting and cash redemption, wherein said currency handling device and said control unit communicate through the wireless communication network.

It seems that if the rejected claims are not anticipated by the art in the manner asserted by the Examiner, there are no findings upon which an obviousness case has been made out so as to require rebuttal.

When claim 5 depending on claims 3, 2 and 1, is considered as a whole under 35 U.S.C. 103, reversal is strongly urged here.

7. CLAIMS 6 AND 7 ARE NOT ANTICIPATED OR MADE OBVIOUS BY WALLER.

Claim 6 and 7 add the feature wherein the system control unit is connected on the "back end" to an Internet or other wired network, but that is not be confused with the locally distributed network on the "front end." The final Office action rejects these claims on paragraph 0067. Claims 6 and 7 by incorporating claim 1, add the ability to communicate through two networks (one local and one long range) through two different ports (an AND function). In para. 0067, if the cell phone is communication with the ATM, this is only one connection path, and not two different communication paths are recited in the claims. The Examiner misunderstands the results that would follow if the system control unit were read on the cell phone according to para. 0067.

8. CLAIM 10 IS NOT ANTICIPATED OR MADE OBVIOUS BY WALLER.

With respect to claim 10 Waller discloses a cell phone, which might communicate through a spread spectrum type of communication recited in the claim, but the cell phone is communicating through a long range cell phone network. The devices of the present claims all operate within 100 meters per claim 1, which is not shown or described for the cell phone of Waller.

9. CLAIM 12 IS NOT ANTICIPATED OR MADE OBVIOUS BY WALLER.

With respect to claim 12 reciting a piconet, Waller discloses a cell phone, but does not disclose a piconet with possibly one master and up to seven slaves as described in the specification at para. 0030 of the specification. This claim is patentable over the cited art.

10. CLAIM 14 IS NOT ANTICIPATED OR MADE OBVIOUS BY WALLER.

Claim 14 recites that the transceiver of the control unit and the transceiver of the cash handling device each comprise a Bluetooth radio.

The Examiner cites para. 0009, but para. 0009 does not mention either Bluetooth communication or a Bluetooth radio. In paragraph 0009, Waller discusses cellular phone communication. The PDA in Waller operates with Irda which is not as powerful as Bluetooth in range and is more directional than Bluetooth. In paragraph 0083, Waller states that some other device might use Bluetooth technology to communicate with the ATM. This is broadening statement in Waller that is not specific enough to be enabling and is not a specific embodiment.

11. CLAIM 17 IS NOT ANTICIPATED OR MADE OBVIOUS BY WALLER.

Claim 17 adds to the subject matter of claim 13 that the system control unit performs at least one of the operations of accounting for cash dispensing, providing for cash settlement and monitoring maintenance information for a plurality of cash handling devices. Support for this limitation is found in para. 0022 of the specification. The Examiner says this is taught by para. 0021 of Waller.

The four functions disclosed in para. 0021 are:

- 1) requesting an amount of cash (by the PDA);
- 2) the ATM obtaining authorization (from the host);
- 3) the ATM dispensing an amount of cash; and

4) the ATM charging a service fee for the transaction, maybe in cooperation with the host.

Para. 0021 of Waller is not describing functions of the PDA except for the first item. The Examiner misreads the paragraph and claim 17, and the rejection should be reversed.

12. CLAIM 20 IS NOT ANTICIPATED OR MADE OBVIOUS BY WALLER.

Claim 20 now adds the matter to claims 1 and 13 which distinguishes from the Waller that an authorization sequence is not necessary to perform cash handling functions. Paragraph 0014 does not make this teaching as the Examiner asserts. That paragraph does not mention maintenance or an authorization sequence.

13. CLAIM 21 IS NOT ANTICIPATED OR MADE OBVIOUS BY WALLER.

Claim 21 now adds to the claims 1 and 13 that both of the operations of providing for cash settlement and monitoring maintenance information are performed by the system control unit. A plain reading of paras. 0011, 0014 and 0021 in Waller does not support the Examiner's assertion that this subject matter is disclosed or suggested.

B. CLAIM 20 IS NOT UNPATENTABLE UNDER 35 U.S.C. 112, FIRST PARAGRAPH FOR LACK OF A WRITTEN DESCRIPTION.

Claim 20 was rejected under 35 U.S.C. §112, first paragraph, as not being supported by a written description in the application. (Final action, para. 2).

It was said that the following limitation was not supported by the specification and drawings:

"wherein the system control unit performs at least one of the operations of cash dispensing, providing for

cash settlement and monitoring maintenance information  
without needing authorization of user access from a  
remotely located network host computer."

Para. 0029 reads, last sentence of the present application reads as follows:

Security features, including authentication and encryption algorithms, can be used to secure communications between devices.

This only states that security features are available as an option and are not mandatory. Because the network is short range for application in a bank or company, it may be in a physically secure setting, unlike ATM machines which are in the public and require security measures, which tie back to the real system control unit which is the bank host computer.

The Examiner confuses the words "can" which is used in para. 0029 with "must" which is not found in para. 0029 or elsewhere. The feature is optional in the present specification. There is no demonstration of security in the detailed embodiments of the present specification as there is in Waller. The Examiner fails to consider the stated environment of the detailed embodiment of the invention in a bank teller area (specification, para. 0026) vs. the ATM being the public for dispensing cash. In addition, encryption is provided in para. 0029 as an alternative to authorization, where security is desired. The Examiner's argument that para. 0029 recites mandatory authorization is not believable.

In Waller, however, security is mandatory to use the PDA as explained in paragraph 0062 and 0063 and 0065 as follows:

[0062] Referring now to FIG. 4, when the transaction program 68 is selected by a user of the PDA 24, the PDA 24 displays a series of screens in a similar way to a

conventional ATM display. A typical screen is shown in FIG. 4, which shows various cash withdrawal options. The sequence of screens and the content of each screen may be customized by the user. As the user carries his/her own graphical user interface, no graphical user interface is required on ATM 14a.

[0063] Referring now to FIG. 5, when a user 70 wishes to withdraw cash from ATM 14a, the user 70 approaches the ATM 14a, executes the transaction program 68 (FIG. 3) on his/her PDA 24, and prepares a transaction. The user 70 prepares a transaction by entering his/her PIN using display 58 (FIG. 3) and selecting a button 72 (FIG. 4) representing an amount to be withdrawn, such as twenty pounds. The controller 52 encrypts the prepared transaction using the encryption facility in the transaction program 68.

[0064] (omitted for brevity)

[0065] On receiving the encrypted prepared transaction, the IrDA port 38 conveys the transmission to the processor 30. The processor 30 decrypts the received transaction and sends the received PIN and transaction request to the host 12 (FIG. 1) for authorization. The processor 30 then conveys a message to the PDA 24 informing the user 70 that the request is being authorized.

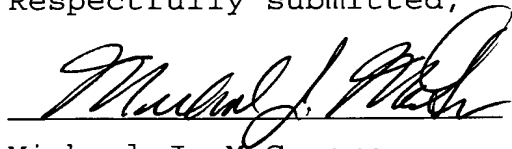
In the above sequence the user has entered a log-on and PIN number in the PDA, transmitted it to the ATM, from where it has been relayed to a bank central computer in Fig. 1 to obtain authorization.

CONCLUSION

Appellant respectfully requests the Board to reverse the Examiners on all issues including the necessary conclusion that claims 1-22 are patentable over the prior art of record.

Respectfully submitted,

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## APPENDIX A

### Claims on Appeal in Patent Application No. 10/005,023

1. (Previously presented) A wireless networked cash management system, comprising:

at least one cash handling device in the system for performing at least one of the operations of coin sorting, coin counting, note counting, note sorting and cash redemption;

a system control unit for performing at least one of a plurality of operations of accounting for cash dispensing by the cash handling device, providing for cash settlement of transactions carried out by the cash handling device and monitoring maintenance information, said control unit also providing commands to the cash handling device for operation of the cash handling device; and

wherein said cash handling device and said system control unit communicate through a wireless communication network operating according to a standard for locally distributed wireless networks; and

wherein the locally distributed wireless network communicates directly without intermediate servers and within a range between the cash handling device and the control unit of no more than approximately 100 meters.

2. (Previously presented) The cash management system of claim 1, wherein the cash handling device is a coin handling device for performing at least one of the operations of coin sorting, coin counting and cash redemption.

3. (Previously presented) The cash management system of claim 2, further comprising a currency handling device for performing at least one of the operations of note sorting, note counting and cash redemption, wherein said currency handling

device and said control unit communicate through the wireless communication network.

4. (Previously presented) The cash management system of claim 1, wherein the cash handling device is a currency handling device for performing at least one of the operations of note sorting, note counting and cash redemption.

5. (Currently amended) The cash management system of claim 1, 2, 3 or 4, further comprising at least one I/O device, wherein the I/O device is a cell phone or a personal digital assistant.

6. (Previously presented) The cash management system of claim 1, wherein the system control unit is electrically connected to a second network selected from a group consisting of: the Internet, an intranet, a LAN and a WAN.

7. (Previously presented) The cash management system of claim 6, wherein the second network utilizes at least one of a telephone dial-up modem, a digital satellite link modem and a broadband cable modem.

8. (Previously presented) The cash management system of claim 1, wherein the wireless communication network operates according to a Bluetooth specification.

9. (Previously presented) The cash management system of claim 8, wherein the wireless communication network further operates according to an RS-232 protocol.

10. (Previously presented) The cash management system of claim 1, wherein the wireless communication network operates in a frequency hopping, spread spectrum range of frequencies in a range from 2.4 Ghz to 2.56 GHz.

11. (Previously presented) The cash management system of claim 1, wherein the wireless communication network operates in an infrared frequency range according to an IrDA standard.

12. (Previously presented) The cash management system of claim 1, wherein the wireless communication network operates

in a piconet distinguished from other networks by a selected frequency hopping sequence.

13. (Previously presented) A wireless networked cash management system comprising:

a system control unit including a radio frequency transceiver; and

a cash handling device, the cash handling device including a radio frequency transceiver for communicating cash handling data and status data to the control unit;

wherein the transceivers communicate directly with each other without the assistance of servers and wherein the transceivers communicate within a range of no more than approximately 100 meters; and

wherein the system control unit performs at least one of the operations of accounting for cash dispensing by the cash handling device, providing for cash settlement of transactions carried out by the cash handling device and monitoring maintenance information.

14. (Previously presented) The cash management system of claim 13, wherein the transceiver of the control unit and the transceiver of the cash handling device each comprise a Bluetooth radio.

15. (Previously presented) The cash management system of claim 13, wherein the transceiver of the control unit and transceiver of the cash handling device operate in the infrared frequency range according to an IrDA standard.

16. (Previously presented) The cash management system of claim 13, wherein the cash handling device is a coin handling device for performing at least one of the operations of coin sorting, coin counting and cash redemption.

17. (Previously presented) The cash management system of claim 13, wherein the system control unit comprises a personal computer that performs at least one of the operations of

accounting for cash dispensing, providing for cash settlement and monitoring maintenance information for a plurality of cash handling machines.

18. (Previously presented) The cash management system of claim 13, further comprising computer peripheral I/O device which is at least one of a printer or a visual display.

19. (Previously presented) The cash management system of claim 13, wherein the cash handling device comprises at least one of a coin counting, coin sorting, note sorting, or note counting device.

20. (Original) The cash management system of claim 1 or 13, wherein the system control unit performs at least one of the operations of cash dispensing, providing for cash settlement and monitoring maintenance information without needing authorization of user access from a remotely located network host computer.

21. (Original) The cash management system of claim 1 or 13, wherein the system control unit performs both of the operations of providing for cash settlement and monitoring maintenance information.

22. (Original) The cash management system of claim 13, further comprising at least one I/O device, wherein the I/O device is a cell phone or a personal digital assistant.

**APPENDIX B**

**Factual Evidence in Application No. 10/005,023**

**Submitted as part of Appeal Brief.**

(None)

APPENDIX C

Related Proceedings in Application No. 10/005,023

Submitted as part of Appeal Brief.

(None)